

WE CLAIM:

1. A wafer lifting device having a lifting platform arranged under a wafer receptacle, wherein the top side of said wafer receptacle includes a wafer bearing area, wherein said lifting platform is arranged to move vertically toward and away from the underside of the wafer receptacle, and wherein at least three pins are arranged to be moved through vertical through holes, which extend from the underside of the wafer receptacle to the wafer bearing area, by said lifting platform, said pins being moveable between a first upper position wherein said pins project from the wafer bearing area by a selected amount and a second lower position wherein said pins are retracted into said through holes, wherein a separate pin guide is provided for each pin, in which pin guide the pin is guided and held for longitudinal movement, and wherein the pin guides are fixedly connected to the wafer receptacle.

2. The wafer lifting device as claimed in claim 1, wherein the pin guide has a guide hole in which the pin is arranged in movable fashion, and the pin guide is arranged to hold the pin in said second lower position when the lifting platform is lowered.

3. The wafer lifting device as claimed in claim 1 wherein the pin is mounted with spring-loading in the direction of said second lower position.

4. The wafer lifting device as claimed in claim 1 wherein the pin guide is integrated in the wafer receptacle and the through hole forms a guide hole for said pin.

5. The wafer lifting device as claimed in claim 1 wherein the pin guide has a cylindrical body in which a guide hole is formed, and wherein said cylindrical body is mounted to the wafer receptacle.

6. The wafer lifting device as claimed in claim 5, wherein the cylindrical body is received in a mounting hole in the wafer receptacle, said mounting hole being coaxial with respect to the guide hole.

7. The wafer lifting device as claimed in claim 6, wherein the cylindrical body has a height corresponding to the thickness of the wafer receptacle and the mounting hole is a through hole having a diameter which is equal to or slightly greater than the diameter of the cylindrical body.

8. The wafer lifting device as claimed in claim 6 wherein the mounting hole has an internal thread and the cylindrical body has an external thread and is arranged to be engaged by a tool and wherein the cylindrical body is screwed into the mounting hole.

9. The wafer lifting device as claimed in claim 5 wherein the cylindrical body, is provided with a flange at a side perpendicular to an axis of the guide hole, wherein said flange has mounting holes for receiving screws for connection to the wafer receptacle.

10. The wafer lifting device as claimed in claim 9, wherein the wafer receptacle is provided with threaded holes corresponding to said mounting holes.

11. The wafer lifting device as claimed in claims 9, wherein threaded bolts are mounted on the wafer receptacle and received through the mounting holes

12. The wafer lifting device as claimed in claim 5 wherein an enlarged bore having an upper and a lower end and having a larger cross section than the guide hole is arranged in the cylindrical body, said enlarged bore being coaxial with respect to the guide hole, wherein the pin has an attachment, which is smaller than the cross section of the enlarged bore and can be moved longitudinally therein together with the pin, and wherein the lower end of the enlarged

bore is formed by a cover attached to the flange plate, said cover having a pin hole, which has a smaller cross section than the enlarged bore and through which the pin penetrates.

13. The wafer lifting device as claimed in claim 12, wherein the attachment is designed as a ring surrounding the pin.

14. The wafer lifting device as claimed in claim 12, wherein a helical spring surrounds the pin in the enlarged bore, said helical spring being retained between the upper end of the enlarged bore and the attachment.

15. The wafer lifting device as claimed in claim 14, wherein the helical spring is composed of a material having a spring durability of greater than 250°C.

16. The wafer lifting device as claimed in claim 15, wherein the material has a spring durability of up to 800°C.